

=> s (download? or transmit? or provid?) (15a)map? and GPS
7858 DOWNLOAD?
491810 TRANSMIT?
1050659 PROVID?
61831 MAP?
4807 (DOWNLOAD? OR TRANSMIT? OR PROVID?) (15A)MAP?
2213 GPS
L1 211 (DOWNLOAD? OR TRANSMIT? OR PROVID?) (15A)MAP? AND GPS

=> s (download? or transmit? or provid?) (15a)map? (p) GPS
7858 DOWNLOAD?
491810 TRANSMIT?
1050659 PROVID?
61831 MAP?
2213 GPS
L2 38 (DOWNLOAD? OR TRANSMIT? OR PROVID?) (15A)MAP? (P) GPS

=> s l1 and (location or locating or position) (15a) (map or display)
513398 LOCATION
101307 LOCATING
1248186 POSITION
37853 MAP
222301 DISPLAY
42722 (LOCATION OR LOCATING OR POSITION) (15A) (MAP OR DISPLAY)
L3 174 L1 AND (LOCATION OR LOCATING OR POSITION) (15A) (MAP OR DISPLAY)

=> s l1 and (location or locating or position) (15a) (map or display?)
513398 LOCATION
101307 LOCATING
1248186 POSITION
SEARCH ENDED BY USER

=> s l1 and (location# or locating or position#) (15a) (map? or display?)
608639 LOCATION#
101307 LOCATING
1305963 POSITION#
61831 MAP?
277964 DISPLAY?
61574 (LOCATION# OR LOCATING OR POSITION#) (15A) (MAP? OR DISPLAY?)

L4 186 L1 AND (LOCATION# OR LOCATING OR POSITION#) (15A) (MAP? OR DISPLAY?)

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L1 211 S (DOWNLOAD? OR TRANSMIT? OR PROVID?) (15A)MAP? AND GPS
L2 38 S (DOWNLOAD? OR TRANSMIT? OR PROVID?) (15A)MAP? (P) GPS
L3 174 S L1 AND (LOCATION OR LOCATING OR POSITION) (15A) (MAP OR DISPLAY)
L4 186 S L1 AND (LOCATION# OR LOCATING OR POSITION#) (15A) (MAP? OR DISPLAY?)

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=> d cit 1-38 l2

1. 5,781,150, Jul. 14, 1998, GPS relative position detection system; Elwood G. Norris, 342/357, 419 [IMAGE AVAILABLE]

2. 5,774,828, Jun. 30, 1998, Mapless GPS navigation system with user

modifiable data base; Randall T. Brunts, et al., 701/210; 340/990, 995; 701/200, 208 [IMAGE AVAILABLE]

3. 5,774,070, Jun. 30, 1998, Method and system for the precise thermal mapping of roads, runways and the like for wintertime safety monitoring and maintenance; Edward Rendon, 340/905, 990; 701/35, 208 [IMAGE AVAILABLE]

4. 5,764,280, Jun. 9, 1998, Display system including an image generator and movable scanner for same; David M. Bloom, et al., 348/53; 345/8 [IMAGE AVAILABLE]

5. 5,760,914, Jun. 2, 1998, Image registration method; Forrest P. Gauthier, et al., 358/298, 406; 382/293; 395/109 [IMAGE AVAILABLE]

6. 5,757,640, May 26, 1998, Product application control with distributed process manager for use on vehicles; Robert J. Monson, 364/131, 138; 701/1, 50 [IMAGE AVAILABLE]

7. 5,752,186, May 12, 1998, Access free wireless telephony fulfillment service system; James E. Malackowski, et al., 455/414, 403, 412 [IMAGE AVAILABLE]

8. 5,748,651, May 5, 1998, Optimum utilization of pseudorange and range rate corrections by SATPS receiver; Len Sheynblat, 371/49.1 [IMAGE AVAILABLE]

9. 5,740,038, Apr. 14, 1998, System and method for optimized control of moving irrigation systems; C. David Hergert, 364/528.19 [IMAGE AVAILABLE]

10. 5,726,660, Mar. 10, 1998, Personal data collection and reporting system; Peter K. Purdy, et al., 342/357, 352 [IMAGE AVAILABLE]

11. 5,717,593, Feb. 10, 1998, Lane guidance system; Michael E. Gvili, 701/207, 224 [IMAGE AVAILABLE]

12. 5,712,899, Jan. 27, 1998, Mobile location reporting apparatus and methods; Harold Pace, II, 340/988; 342/357 [IMAGE AVAILABLE]

13. 5,712,632, Jan. 27, 1998, Navigation apparatus for land vehicle inputting road traffic information; Shigeki Nishimura, et al., 340/995, 905, 990; 701/201, 209 [IMAGE AVAILABLE]

14. 5,699,255, Dec. 16, 1997, Map transmission for in-vehicle navigation system with dynamic scale/detail adjustment; Thomas W. Ellis, et al., 701/212; 340/995; 342/450 [IMAGE AVAILABLE]

15. 5,699,245, Dec. 16, 1997, Distributed lightning detection system; David George Herold, 702/4 [IMAGE AVAILABLE]

16. 5,689,431, Nov. 18, 1997, Golf course yardage and information system; Richard W. Rudow, et al., 701/213; 340/990, 995; 342/457; 701/208, 215, 300 [IMAGE AVAILABLE]

17. 5,627,547, May 6, 1997, Mapless GPS navigation system in vehicle entertainment system; Ashok B. Ramaswamy, et al., 342/357; 701/201 [IMAGE AVAILABLE]

18. 5,619,211, Apr. 8, 1997, Position locating and communication system using multiple satellite constellations; Philip R. Horkin, et al., 342/357, 352, 356 [IMAGE AVAILABLE]

19. 5,557,524, Sep. 17, 1996, GPS/GLONASS travel recorder; Stanley C. Maki, 701/35; 340/995; 342/457; 346/8; 347/2; 701/213; 705/30 [IMAGE AVAILABLE]
20. 5,539,398, Jul. 23, 1996, GPS-based traffic control preemption system; Timothy J. Hall, et al., 340/907, 906, 988, 990, 995; 701/117, 213 [IMAGE AVAILABLE]
21. 5,528,248, Jun. 18, 1996, Personal digital location assistant including a memory cartridge, a GPS smart antenna and a personal computing device; Glenn C. Steiner, et al., 342/357; 364/231.2, DIG.1 [IMAGE AVAILABLE]
22. 5,528,244, Jun. 18, 1996, Processing for mode S signals suffering multipath distortion; Carl E. Schwab, 342/37, 30, 32, 39 [IMAGE AVAILABLE]
23. 5,523,765, Jun. 4, 1996, Method and apparatus for detecting vehicle location for a vehicle navigation system; Shigeru Ichikawa, 342/451, 357, 457; 701/213 [IMAGE AVAILABLE]
24. 5,504,482, Apr. 2, 1996, Automobile navigation guidance, control and safety system; Kenneth D. Schreder, 340/995, 988; 701/213 [IMAGE AVAILABLE]
25. 5,485,161, Jan. 16, 1996, Vehicle speed control based on GPS/MAP matching of posted speeds; David Vaughn, 342/357, 457; 701/93, 121, 208, 213 [IMAGE AVAILABLE]
26. RE 35,100, Nov. 28, 1995, Variable rate application system; Robert J. Monson, et al., 111/130, 200, 903; 239/1, 61, 63 [IMAGE AVAILABLE]
27. 5,450,329, Sep. 12, 1995, Vehicle location method and system; Jesse H. Tanner, 701/213; 340/973, 993; 342/29, 357, 455; 401/4; 701/4, 218, 301 [IMAGE AVAILABLE]
28. 5,440,484, Aug. 8, 1995, Calibration method for a relative heading sensor; Wei-Wen Kao, 701/207; 33/356; 701/224; 702/93 [IMAGE AVAILABLE]
29. 5,428,358, Jun. 27, 1995, Apparatus and method for ionospheric mapping; Sheldon B. Gardner, 342/26; 73/170.16, 170.24, 170.27; 702/5 [IMAGE AVAILABLE]
30. 5,422,814, Jun. 6, 1995, Global position system receiver with map coordinate system outputs; David S. Sprague, et al., 701/213; 342/357; 701/206, 300 [IMAGE AVAILABLE]
31. 5,404,648, Apr. 11, 1995, Navigational plotter; Ralph A. Taylor, Jr., 33/431, 474, 563 [IMAGE AVAILABLE]
32. 5,396,647, Mar. 7, 1995, GPS base wide area communication system site selection; Michael J. Thompson, et al., 455/440; 342/357; 455/62, 437 [IMAGE AVAILABLE]
33. 5,345,382, Sep. 6, 1994, Calibration method for a relative heading sensor; Wei-Wen Kao, 702/104; 33/356; 701/224 [IMAGE AVAILABLE]
34. 5,231,609, Jul. 27, 1993, Multiplatform sonar system and method for underwater surveillance; Marvin C. Gaer, 367/99, 117, 118, 136 [IMAGE AVAILABLE]
35. 5,220,876, Jun. 22, 1993, Variable rate application system; Robert J. Monson, et al., 111/130, 200, 903; 239/1, 61, 63; 706/904, 930 [IMAGE AVAILABLE]

36. 5,214,757, May 25, 1993, Interactive automated mapping system; Thad Mauney, et al., 345/331; 340/990, 995; 345/356; 701/208, 213; 707/104 [IMAGE AVAILABLE]

37. 5,025,261, Jun. 18, 1991, Mobile object navigation system; Tomozo Ohta, et al., 342/357 [IMAGE AVAILABLE]

38. 4,982,359, Jan. 1, 1991, System and method for recognizing vehicle position on elevated freeway; Hiroshi Kamiyama, et al., 701/200; 73/178R; 340/988; 701/207, 225 [IMAGE AVAILABLE]

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L4 186 S L1 AND (LOCATION# OR LOCATING OR POSITION#) (15A) (MAP? OR DI

=> s 14 not 12

L5 153 L4 NOT L2

=> s 15 and (personal or portable) (10a) (communicator or assistant or device)

49318 PERSONAL

80375 PORTABLE

779 COMMUNICATOR

6986 ASSISTANT

995437 DEVICE

19726 (PERSONAL OR PORTABLE) (10A) (COMMUNICATOR OR ASSISTANT OR

DEVIC

E)

L6 19 L5 AND (PERSONAL OR PORTABLE) (10A) (COMMUNICATOR OR ASSISTANT O
R DEVICE)

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1. 5,760,742, Jun. 2, 1998, Integrated mobile GIS/GPS/AVL with wireless messaging capability; Charles N. Branch, et al., 342/457; 455/456; 701/207 [IMAGE AVAILABLE]

2. 5,758,288, May 26, 1998, Signal time of arrival position determining method for calculating cellular telephone billing charges; Michael Jeffrey Dunn, et al., 455/456; 342/463; 455/406 [IMAGE AVAILABLE]

3. 5,742,233, Apr. 21, 1998, Personal security and tracking system; Mark S. Hoffman, et al., 340/573, 539, 825.49, 825.54; 342/357, 457; 379/38 [IMAGE AVAILABLE]

4. 5,727,057, Mar. 10, 1998, Storage, transmission, communication and access to geographical positioning data linked with standard telephony numbering and encoded for use in telecommunications and related services; Mark Emery, et al., 379/211, 16, 212, 230, 246; 455/406, 456 [IMAGE AVAILABLE]

5. 5,699,244, Dec. 16, 1997, Hand-held GUI PDA with GPS/DGPS receiver for collecting agronomic and GPS position data; Louis George Clark, Jr., et al., 702/2; 345/326; 701/213 [IMAGE AVAILABLE]

6. 5,669,061, Sep. 16, 1997, Automatic cellular phone tracking; John F. Schipper, 455/429; 342/357; 455/440 [IMAGE AVAILABLE]
7. 5,644,386, Jul. 1, 1997, Visual recognition system for LADAR sensors; Gary Kim Jenkins, et al., 356/4.01; 244/3.16; 250/342; 348/143, 147, 384, 418; 382/103, 224 [IMAGE AVAILABLE]
8. 5,640,002, Jun. 17, 1997, Portable RF ID tag and barcode reader; Jonathan Paul Ruppert, et al., 235/472, 383, 462, 492, 493 [IMAGE AVAILABLE]
9. 5,600,706, Feb. 4, 1997, Method and system for determining the position of a mobile receiver; Michael J. Dunn, et al., 455/456; 342/357, 450, 457, 463; 455/556, 566 [IMAGE AVAILABLE]
10. 5,594,425, Jan. 14, 1997, Locator device; David L. Ladner, et al., 340/825.06, 825.44, 825.45, 825.49; 342/457 [IMAGE AVAILABLE]
11. 5,565,874, Oct. 15, 1996, Expandable, multi-level intelligent vehicle highway system; Melvin A. Rode, 342/457; 340/990, 995; 701/214 [IMAGE AVAILABLE]
12. 5,552,989, Sep. 3, 1996, Portable digital map reader; Georges Bertrand, 701/200; 340/990, 995; 701/207, 225 [IMAGE AVAILABLE]
13. 5,543,789, Aug. 6, 1996, Computerized navigation system; David A. Behr, et al., 340/995, 990, 991; 701/207 [IMAGE AVAILABLE]
14. 5,515,285, May 7, 1996, System for monitoring vehicles during a crisis situation; Charles N. Garrett, Sr., et al., 701/300; 340/426, 990; 701/219 [IMAGE AVAILABLE]
15. 5,488,559, Jan. 30, 1996, Map-matching with competing sensory positions; Leslie G. Seymour, 701/208; 342/357, 457; 701/214, 217 [IMAGE AVAILABLE]
16. 5,406,491, Apr. 11, 1995, Navigational system for trip routing; David J. Lima, 701/210; 340/990, 995; 342/457; 701/212, 213 [IMAGE AVAILABLE]
17. 5,334,974, Aug. 2, 1994, Personal security system; James R. Simms, et al., 340/990, 426, 988, 995; 342/457; 455/404, 457; 701/300 [IMAGE AVAILABLE]
18. 5,223,844, Jun. 29, 1993, Vehicle tracking and security system; John P. Mansell, et al., 342/357; 340/825.49; 342/457; 379/913; 455/404, 456 [IMAGE AVAILABLE]
19. 5,161,242, Nov. 3, 1992, Automated repeating sextant (ARS); Peter C. Boulay, 701/222; 33/268; 356/145, 146; 701/200 [IMAGE AVAILABLE]

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